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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/567,925	02/10/2006	Kazushi Nishizawa	0054-0308PUS1	2124

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BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER	
LAMARRE, GUY J	

ART UNIT	PAPER NUMBER
2112	

NOTIFICATION DATE	DELIVERY MODE
10/03/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	10/567,925	NISHIZAWA ET AL.	
	Examiner	Art Unit	
	Guy J. Lamarre	2112	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 February 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 February 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *02/10/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

* **Claims 1-17** are rejected under 35 U.S.C. 102(b) as being anticipated by **KUO** (USPN 5940448, 8/17/99).

As per Claims 1-17, KUO discloses, e.g., in Fig. 4:DP/DM/Blocks 56,58,60/RXP/RXM, an equivalent deskewing or phase compensating or phase error correcting methodology wherein data processing is delayed until phase compensation has taken place and data is stable enough for further processing, said deskewing comprising logic gates composed of latches/And-gates, …,. for delaying data flow through transmission lines/bus.

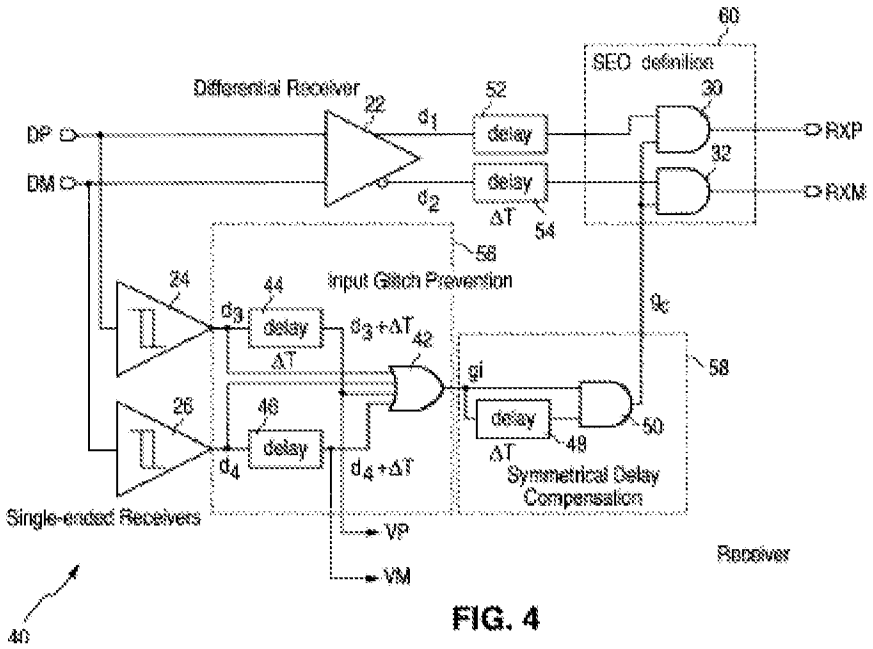

FIG. 4

As per Claims:

1**, KUO** discloses, e.g., in Fig. 4:*DP/DM/Blocks 22,24,26,56,58,60/RXP/RXM* - Fig. 5 and related description, an equivalent variable power distributor, which includes: a set of transmission lines which are first and second transmission lines; a two-way distributor

provided on an input side of the set of the transmission lines; a 90-degree hybrid circuit provided on an output side of the set of the transmission lines; and a variable phase shifter, a variable resistance attenuator, and a power amplifier which are provided on each of the set of transmission lines between the two-way distributor and the 90-degree hybrid circuit to control an amplitude and a phase of an input signal and amplify power of the input signal, the variable power distributor being characterized by comprising: a monitoring mechanism - Fig. 4:*DP/DM/Blocks 22,24,26,*-for monitoring output signals from the 90-degree hybrid circuit; and error detection means for detecting an error present in each component between the first and second transmission lines based on a monitoring output from the monitoring mechanism.

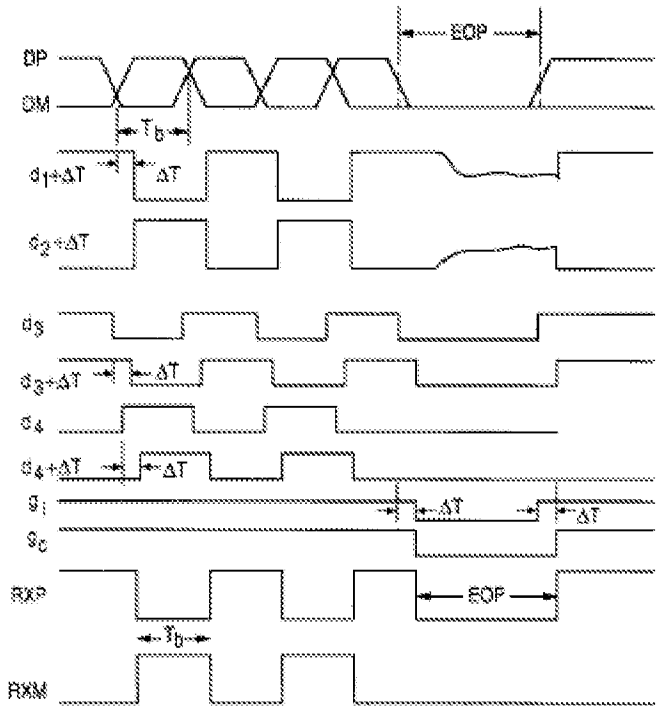

FIG. 5

2, **KUO** discloses, e.g., in Fig. 4:DP/DM/Blocks 22,24,26,56,58,60/RXP/RXM - Fig. 5

and related description, an equivalent variable power distributor according to claim 1, characterized in that the error detection means obtains, from the monitoring mechanism, output signals on the first and second transmission lines when a phase of the variable phase shifter provided on the first transmission line is rotated and output signals on the first and second transmission lines when a phase of the variable phase shifter provided on the second transmission line is rotated, and detects the error present in each component between the first and second transmission lines using a rotating element electric field vector method.

3, **KUO** discloses, e.g., in Fig. 4:DP/DM/Blocks 22,24,26,56,58,60/RXP/RXM - Fig. 5 and related description, an equivalent variable power distributor according to claim 2, characterized by further comprising control means for controlling the amplitude and the phase by correcting set values for the variable phase shifters and the variable resistance attenuators based on a detection result obtained by the error detection means.

4, **KUO** discloses, e.g., in Fig. 4:DP/DM/Blocks 22,24,26,56,58,60/RXP/RXM - Fig. 5 and related description, an equivalent variable power distributor according to claim 3, characterized in that the control means calculates an amplitude ratio and a phase difference between the first and second transmission lines based on the detection result obtained by the error detection means to correct the set values for the variable phase shifters and the variable resistance attenuators.

5, **KUO** discloses, e.g., in Fig. 4:DP/DM/Blocks 22,24,26,56,58,60/RXP/RXM - Fig. 5

and related description, an equivalent error detection method for a variable power distributor that includes: a set of transmission lines which are first and second transmission lines; a two-way distributor provided on an input side of the set of the transmission lines; a 90-degree hybrid circuit provided on an output side of the set of the transmission lines; and a variable phase shifter, a variable resistance attenuator, and a power amplifier which are provided on each of the set of transmission lines between the two-way distributor and the 90-degree hybrid circuit to control an amplitude and a phase of an input signal and amplify power of the input signal and detects an error present in each component between the first and second transmission lines, the error detection method being characterized by comprising: detecting output signals from the first and second transmission lines when a phase of the variable phase shifter provided on the first transmission line is rotated; detecting output signals based on the first and second transmission lines when a phase of the variable phase shifter provided on the second transmission line is rotated; and detecting the error present in each component based on the output signals using a rotating element electric field vector method.

6, **KUO** discloses, e.g., in Fig. 4:DP/DM/Blocks 22,24,26,56,58,60/RXP/RXM - Fig. 5 and related description, an equivalent set value correction method for the variable power distributor, characterized by comprising: obtaining an amplitude ratio and a phase difference between the first and second transmission lines based on a detection result of the error detected by the error detection method for the variable power distributor according to claim 5; and correcting set values for the variable phase shifters and the variable resistance attenuators.

7, **KUO** discloses, e.g., in Fig. 4:DP/DM/Blocks 22,24,26,56,58,60/RXP/RXM - Fig. 5 and related description, an equivalent variable power distributor according to claim 1, characterized in that the error detection means obtains, from the monitoring mechanism, output signals on the first and second transmission lines when a phase of the variable phase shifter provided on the first transmission line is rotated and output signals on the first and second transmission lines when a phase of the variable phase shifter provided on the second transmission line is rotated, and detects the error present in each component between the first and second transmission lines using an improved rotating element electric field vector method.

8, **KUO** discloses, e.g., in Fig. 4:DP/DM/Blocks 22,24,26,56,58,60/RXP/RXM - Fig. 5 and related description, an equivalent variable power distributor according to claim 7, characterized by further comprising control means for controlling the amplitude and the phase by correcting set values for the variable phase shifters and the variable resistance attenuators based on a detection result obtained by the error detection means.

9, **KUO** discloses, e.g., in Fig. 4:DP/DM/Blocks 22,24,26,56,58,60/RXP/RXM - Fig. 5 and related description, an equivalent variable power distributor according to claim 8, characterized in that the control means calculates an amplitude ratio and a phase difference between the first and second transmission lines based on the detection result obtained by the error detection means to correct the set values for the variable phase shifters and the variable resistance attenuators.

10, **KUO** discloses, e.g., in Fig. 4:DP/DM/Blocks 22,24,26,56,58,60/RXP/RXM - Fig. 5 and related description, an equivalent error detection method for a variable power distributor that includes: a set of transmission lines which are first and second transmission lines; a two-way distributing circuit provided on an input side of the set of the transmission lines; a 90-degree hybrid circuit provided on an output side of the set of the transmission lines; and a variable phase shifter, a variable resistance attenuator, and a power amplifier which are provided on each of the set of transmission lines between the two-way distributor and the 90-degree hybrid circuit to control an amplitude and a phase of an input signal and amplify power of the input signal and detects an error present in each component between the first and second transmission lines, the error detection method being characterized by comprising: detecting output signals from the first and second transmission lines when a phase of the variable phase shifter provided on the first transmission line is rotated; detecting output signals from the first and second transmission lines when a phase of the variable phase shifter provided on the second transmission line is rotated; and detecting the error present in each component from the output signals using a rotating element electric field vector method.

11, **KUO** discloses, e.g., in Fig. 4:DP/DM/Blocks 22,24,26,56,58,60/RXP/RXM - Fig. 5 and related description, an equivalent set value correction method for the variable power distributor, characterized by comprising: obtaining an amplitude ratio and a phase difference between the first and second transmission lines based on a detection result of the error detected by the error detection method for the variable power distributor

according to claim 10; and correcting set values for the variable phase shifters and the variable resistance attenuators.

12, **KUO** discloses, e.g., in Fig. 4:DP/DM/Blocks 22,24,26,56,58,60/RXP/RXM - Fig. 5 and related description, an equivalent variable power distributor including: a set of transmission lines which are first and second transmission lines; a 90-degree hybrid circuit provided on each of input and output sides of the set of the transmission lines; and a variable phase shifter and a variable resistance attenuator which are provided on each of the set of transmission lines between the 90-degree hybrid circuit provided on the input side and the 90-degree hybrid circuit provided on the output side to control an amplitude and a phase of an input signal, the variable power distributor being characterized by comprising: a monitoring mechanism for monitoring output signals from the 90-degree hybrid circuit; and error detection means for detecting an error present in each component between the first and second transmission lines based on a monitoring output from the monitoring mechanism.

13, **KUO** discloses, e.g., in Fig. 4:DP/DM/Blocks 22,24,26,56,58,60/RXP/RXM - Fig. 5 and related description, an equivalent variable power distributor according to claim 12, characterized in that the error detection means obtains, from the monitoring mechanism, output signals on the first and second transmission lines when a phase of the variable phase shifter provided on the first transmission line is rotated and output signals on the first and second transmission lines when a phase of the variable phase shifter provided on the second transmission line is rotated and detects the error present in each component

between the first and second transmission lines using an improved rotating element electric field vector method.

14, **KUO** discloses, e.g., in Fig. 4:DP/DM/Blocks 22,24,26,56,58,60/RXP/RXM - Fig. 5 and related description, an equivalent variable power distributor according to claim 13, characterized by further comprising control means for controlling the amplitude and the phase by correcting set values for the variable phase shifters and the variable resistance attenuators based on a detection result obtained by the error detection means.

15, **KUO** discloses, e.g., in Fig. 4:DP/DM/Blocks 22,24,26,56,58,60/RXP/RXM - Fig. 5 and related description, an equivalent variable power distributor according to claim 14, characterized in that the control means calculates an amplitude ratio and a phase difference between the first and second transmission lines based on the detection result obtained by the error detection means to correct the set values for the variable phase shifters and the variable resistance attenuators.

16, **KUO** discloses, e.g., in Fig. 4:DP/DM/Blocks 22,24,26,56,58,60/RXP/RXM - Fig. 5 and related description, an equivalent error detection method for a variable power distributor that includes: a set of transmission lines which are first and second transmission lines; a 90-degree hybrid circuit provided on each of input and output sides of the set of the transmission lines; and a variable phase shifter and a variable resistance attenuator which are provided on each of the set of transmission lines between the 90-degree hybrid circuit provided on the input side and the 90-degree hybrid circuit provided

on the output side to control an amplitude and a phase of an input signal and detects an error present in each component between the first and second transmission lines, the error detection method being characterized by comprising: detecting output signals from the first and second transmission lines when a phase of the variable phase shifter provided on the first transmission line is rotated; detecting output signals from the first and second transmission lines when a phase of the variable phase shifter provided on the second transmission line is rotated; and detecting the error present in each component based on the output signals using an improved rotating element electric field vector method.

17, **KUO** discloses, e.g., in Fig. 4:DP/DM/Blocks 22,24,26,56,58,60/RXP/RXM - Fig. 5 and related description, an equivalent set value correction method for a variable power distributor, characterized by comprising: obtaining an amplitude ratio and a phase difference between the first and second transmission lines based on a detection result of an error detected by the error detection method for a variable power distributor according to claim 16; and correcting set values for the variable phase shifters and the variable resistance attenuators.

- **Claims 1, 5-6, 10-12, 16-17** are rejected under 35 U.S.C. 102(b) as being anticipated by **Applicants' Admitted prior art**.

As per Claims 1, 5-6, 10-12, 16-17, Applicants' Admitted prior art discloses, e.g., in Fig. 13 and at page 1 line13 et seq., an equivalent variable power distributor, which includes: a set of transmission lines which are first and second transmission lines; a two-way distributor provided on an input side of the set of the transmission lines; a 90-degree hybrid circuit provided on an output side of the set of the transmission lines; and a variable phase shifter, a variable resistance attenuator, and a power amplifier which are provided on each of the set of transmission lines between the two-way distributor and the 90-degree hybrid circuit to control an amplitude and a phase of an input signal and amplify power of the input signal, the variable power distributor being characterized by comprising: a monitoring mechanism for monitoring output signals from the 90-degree hybrid circuit; and error detection means for detecting an error present in each component between the first and second transmission lines based on a monitoring output from the monitoring mechanism.

Abstract

* Applicant is reminded of the proper language and format for an abstract of the disclosure.

> The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 250 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

. The abstract of the disclosure is objected to because said abstract contains legal phraseology claims, such as "means". Correction is required. See MPEP § 608.01(b).

CONCLUSION

* Any inquiry concerning this communication or earlier communications from the examiner should be directed to Guy J. Lamarre, P.E., whose telephone number is (571) 272-3826. The examiner can normally be reached on Monday to Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jacques Louis-Jacques, can be reached at (571) 272-6962. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may also be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Guy J Lamarre/
Primary Examiner, Art Unit 2112